



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

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June 29, 2007

By Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: WT Docket No. 02-55; *Ex Parte Presentation*

Dear Ms. Dortch:

The County of Fairfax, Virginia, hereby provides notice pursuant to § 1.1206(b)(1) & (2) of the Commission's rules, 47 C.F.R. § 1.1206(b)(1) & (2), of a meeting held on Thursday, June 28, 2007, with Bureau Chief Derek Poarch, David L. Furth, and Timothy A. Peterson, all of the Public Safety and Homeland Security Bureau. Fairfax County was represented by Erin C. Ward, Walter S. ("Skip") Munster, David J. ("Duff") Barney, and Kevin C. Sheehan. The meeting was held to discuss the Petition of the County of Fairfax, Virginia, for Waiver of the Commission's June 26, 2008, Program Completion Date for Rebanding the County's 800 MHz Channels ("Fairfax County Petition"). The Fairfax County Petition was filed in the above-referenced docket on May 24, 2007. At the meeting, Fairfax County presented the Bureau representatives with the attached written document, which further addresses the Fairfax County Petition.

This notice and copies of the presentation are being filed electronically for inclusion in the public record of these proceedings pursuant to § 1.1206(b)(1) of the Commission's rules.

Sincerely,

Erin C. Ward,
Assistant County Attorney

Attachments

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Overview of the Regional Rebanding Process in the National Capital Region

Presentation to FCC PSHSB Staff
June 28, 2007



The County of Fairfax, Virginia

Ex Parte Materials; *In the Matter of Improving Public Safety
Communications in the 800 MHz Band*, WT Docket No. 02-55

What's At Risk?

- One of the most advanced interoperable public safety communications environments in the United States, developed over the past 20 years at a cost of millions of federal and local dollars
- NCR Interoperability was given the highest possible rating in the Department of Homeland Security's January 2007 "Tactical Interoperable Communications Scorecards" report:

"The NCR UA conducts multidiscipline and multijurisdictional communications across the area on a daily basis. The well-established use of their shared systems by primary first responders as well as proficiency of using MIRS and the regional radio cache for outside agencies was seamlessly demonstrated during the TICP validation exercise."

What's At Risk?

- Mutual aid between jurisdictions that use interoperable communications every hour of every day
 - Between 5/21/07 and 6/21/07 Fairfax County Fire, Rescue and EMS responded into other jurisdictions 303 times and other jurisdictions responded into Fairfax County approximately 300 times
- NCR radio interoperability that is vital to responding to any major disaster, terrorist attack, or in planned major events
 - Sniper Incident, October 2002
 - Pentagon Attack, September 2001
 - Presidential Inaugurations
 - Memorial Dedications

What's At Risk?

- Fairfax County has worked closely with other licensees in and around the NCR for over two years to develop a regional rebanding plan that will accomplish rebanding in the safest and most efficient manner
- The regional rebanding efforts were coordinated with the 800 MHz Transition Administrator, Sprint-Nextel and Motorola
- The County's Petition for Waiver is made to allow the County to reband its radio systems in accordance with this regional rebanding plan

NCR Regional Rebanding Simplified

- First, reprogram all NCR subscriber radios to enable those radios to adapt seamlessly to the new frequencies that will be made to the region's trunked radio systems (sites/repeaters)
- Second, the region's trunked radio systems (sites/repeaters) are retuned to the new frequencies

Steps to NCR Rebanding

- The regional rebanding plan will take into consideration all of the interoperability relationships and dependencies, and will execute regional rebanding as one project instead of fourteen or more separate mini-projects
 - Initial tasks, such as Preparation of Plans/Estimates and FRA execution are underway now for some licensees
 - Master Plan and Schedule Development
 - Final Master Plan Publication

Steps to NCR Rebanding

- Licensees must analyze the new frequencies assigned to them for suitability, compatibility, intermodulation, etc.
- Regional radio templates must be collected, aggregated, analyzed, and impact reports developed and distributed to regional operators
 - Collection of Subscriber Radio Templates and Fleetmapping Data
 - Development of Subscriber Radio Template Impact Reports
 - Regional Operators Review and Verify Regional Subscriber Radio Template Impact Reports

Steps to NCR Rebanding

- New subscriber radio templates must be developed for each regional operator; these templates are different for each operator and for each subscriber radio group within each operator's various public safety agencies
- The NCR estimates an average of 75 templates per operator, or the development and testing of over 1,000 templates in order to maintain comparable facilities in the NCR

Steps to NCR Rebanding

- Maintaining adequate public safety coverage at all times limits the availability of vehicles and personnel
- NCR has approximately 35,000 subscriber radios that require approximately 45 minutes-per-radio to reband (not including vehicle removal and installation times)
- Each subscriber radio must have its ROM updated with Motorola's new rebanding software
- Each subscriber group must be reprogrammed with the new rebanding template for that specific group
- Reprogram radios linked to 1-120 systems first, then remaining radios linked to NPSPAC systems

Steps to NCR Rebanding

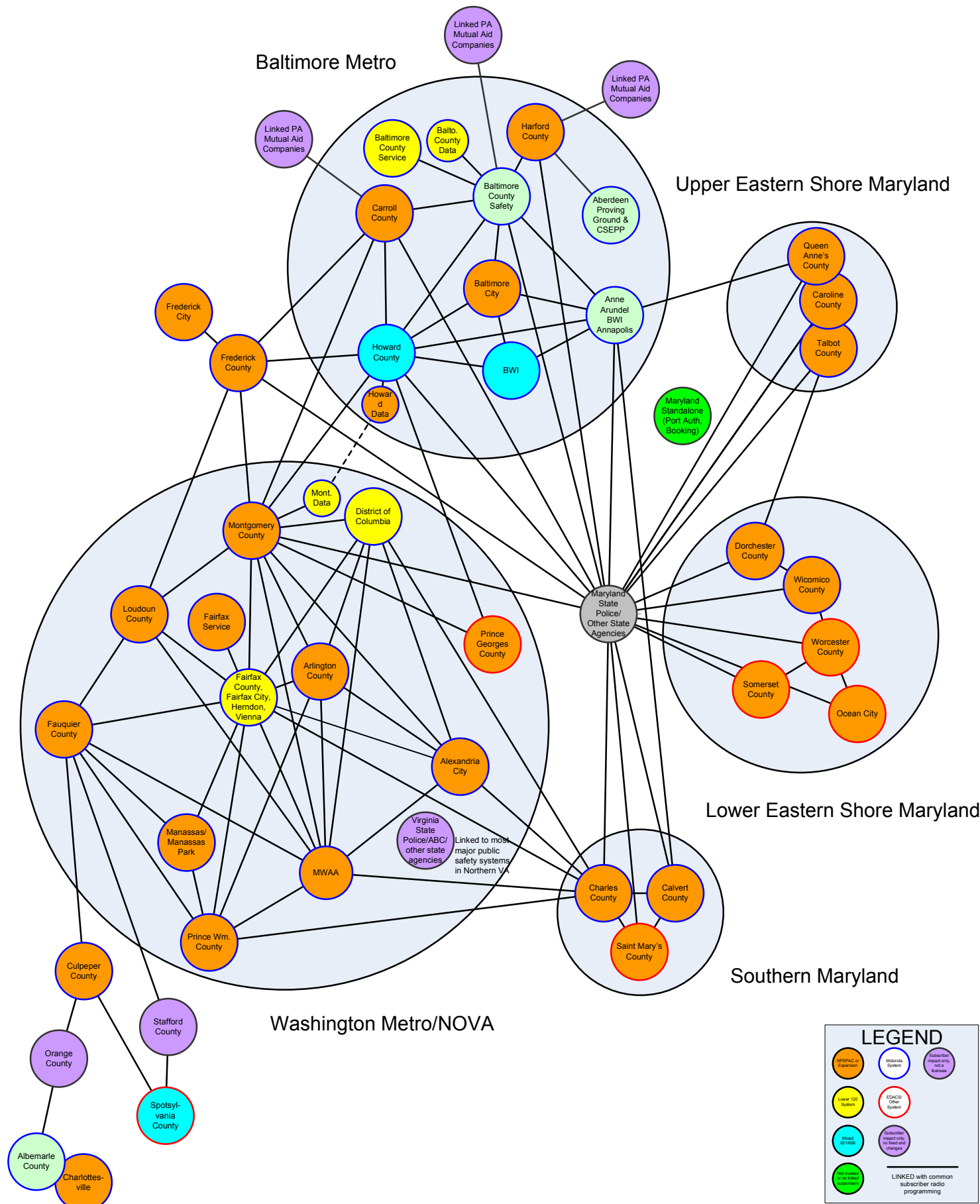
- The rebanding of the region's trunked radio systems (sites/repeaters) must be coordinated with all 14 licensees in the NCR, and an additional 11 licensees outside of the NCR
- For the NCR this requires retuning 1,142 repeaters on 14 trunked radio systems operating from 84 sites

Conclusion

- The Fairfax County Board of Supervisors has directed staff to ensure that public safety communications remain interoperable throughout the NCR rebanding process
- The County's Waiver is based on a plan that will maintain comparable facilities and NCR interoperability, and fulfill the FCC's goals and orders
- Filing with the FCC in support of the waiver include: Cities of Alexandria and Manassas, Loudoun and Prince William Counties in Virginia; City of Baltimore and Montgomery County in Maryland; District of Columbia; and the Metropolitan Washington Airports Authority

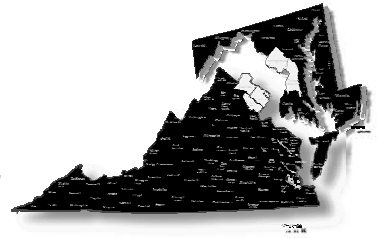
National Capital Region and Surrounding Areas

800 MHz Voice Radio Interoperability Web



National Capital Region

Tactical Interoperable Communications Scorecard



Summary



Governance:
Advanced Implementation



Standard Operating Procedures:
Advanced Implementation



Usage:
Advanced Implementation

The National Capital Region (NCR) Urban Area (UA) includes the District of Columbia. It also includes the Virginia city of Alexandria; and the Virginia counties of Arlington, Fairfax, Loudoun, and Prince William; and the Maryland counties of Montgomery and Prince George's.

Governance: *Advanced Implementation*



Interoperability in the NCR UA is overseen by a hierarchy of formalized committees, headed by the Senior Policy Group at the executive level. The Washington Council of Governments' Joint Police and Fire Communications Committee addresses specific technical and operational policies. Agreements among agencies are largely in place and are being compiled, and steps should be taken to ensure that these agreements are regularly reviewed. An established strategic plan for voice communications was developed and is currently being updated to incorporate wireless data communications, as well as to include additional state and federal agencies. The NCR UA has demonstrated success in using funding to address regional communications interoperability needs, most notably through the joint acquisition and implementation of a cache of 1,250 NCR radios. Given the sustained success of the UA in working together to attain interoperability assets through cooperated efforts, the area should consider the merits of documenting a regionwide funding strategy that comprehensively addresses regional interoperability fiscal needs for the next 3 to 5 years.

Recommendations:

- Investigate means to more formally involve federal agencies (in addition to communications working group membership) and define their roles and responsibilities
- Establish and/or identify the UA's systematic process to develop and review agreements (e.g., usage agreements, memoranda of understanding) at least every 3 to 5 years and after significant events or upgrades
- Build on the UA's success to support statewide interoperability throughout Virginia and Maryland

Standard Operating Procedures (SOP): *Advanced Implementation*



The policies for use of the NCR UA shared systems, as well as the Metropolitan Interoperability Radio System (MIRS) fixed gateway system and NCR radio cache, are long established and were effectively documented in Section 3 of the Tactical Interoperable Communications Plan (TICP). The UA used the TICP as an opportunity to enhance some of these policies and to disseminate them to all included agencies. The UA also undertook an aggressive effort to document communications assets in the area through the use of the CASM tool. National Incident Management System (NIMS)/Incident Command System (ICS) has been in place for more than 1 year and is proficiently used; particularly by the fire community. NIMS/ICS was effectively used during the TICP validation exercise, including a successful deployment of the Communications Unit and Communications Unit Leader (COML). The COML was able to efficiently deploy multi-agency resources and coordinated by radio and face-to-face with command and general staff.

The area is committed to integrating the COML position into its response structure and officials have indicated that they hope to be actively involved in the development of this training curriculum.

Recommendation:

- Continue basic and advanced training and exercises on SOPs (include communications unit implementation consistent with the TICP) to ensure that all participating first responder agencies attain and maintain NIMS/ICS compliance

Usage: *Advanced Implementation*

The NCR UA conducts multidiscipline and multijurisdictional communications across the area on a daily basis. The well-established use of their shared systems by primary first responders as well as proficiency of using MIRS and the regional radio cache for outside agencies was seamlessly demonstrated during the TICP validation exercise. The UA specifically verified that its personnel could achieve interoperable communications using fixed gateways with responders from Prince George’s County, which is the only county not currently using a 800 megahertz (MHz) system. Communication was also achieved with multiple state and federal agencies.

Recommendation:

- Consider adding communications interoperability as a component of all future exercises and include agencies outside of the defined UA

Below is a summary of the area’s existing technology used to provide communications interoperability:

Technology Overview

The NCR UA has 25 separate communications systems in the area servicing public safety agencies in the District of Columbia, northern Virginia, and Maryland. The District of Columbia Fire and Emergency Medical Services, all of the suburban northern Virginia, and Maryland public safety agencies (except those in Prince George’s County, Maryland) are using separate but interconnected 800 MHz Motorola SmartZone™ systems. Regional interoperability is primarily achieved through the use of shared systems, fixed gateways, shared channels, talk groups, and cached radios. The fixed gateways interconnect the NCR Police Mutual Aid Radio System, the Fire Mutual Aid Radio System, and National Public Safety Policy Advisory Committee channels (known locally as the regional Interoperability Network System). Mobile gateways are only used on an incident-specific basis.

The NCR UA anticipates migrating existing radio systems to a Project 25 (P25)-compliant system in the near future. Alexandria and Arlington, Virginia, are expected to upgrade their existing systems to become P25-compliant, and a new P25-compliant radio network will be deployed in Prince George’s County, Maryland. Other jurisdictions in the NCR UA will have to make similar upgrades in order to ensure effective communications are maintained throughout the area.

In the long-term, the NCR UA is considering expanding to include the cities of Baltimore, Maryland, and Richmond, Virginia. The UA expansion will require extending the capabilities of regional radio systems and interoperability capabilities to these new areas.

County of Fairfax and Participating Regional Licensees Regional Rebanding Project

Motorola

